

## ABSTRACT

One embodiment of the invention relates to a signal conversion system for converting an asynchronous signal to an isochronous signal to permit displaying network-delivered digital content on a television device. A computing device acts as the source or storage of digital video content. A conversion device is communicatively coupled to the computing device to receive asynchronous digital video content. Either the conversion device or the computing device identifies two or more reference markers in the asynchronous video stream and determines a clock rate from the known time interval between the two or more reference markers and the amount of video content received between the two or more reference markers. The conversion device generates an isochronous digital video stream having the video content at an interval corresponding to the clock rate. The clock rate in the isochronous signal approximates an original clock rate for the digital video stream.